

## APPENDIX F -- SAM MENU

**F-1. Description.** SAM is most conveniently run through the SAM menu, Figure F2, which will appear by typing: **SAM**. The several options on each screen of the menu can be run by moving the cursor, or highlighted bar, to the desired option and hitting enter, or simply by typing the number of the option. There is an escape to DOS on each screen. The **F9** key, page up and page down keys, and the left and right arrow keys all toggle between screens. The **H** key displays the Help menu. All options return the user to the menu when their respective programs are through executing. When the cursor sits on an item in the menu, a descriptive prompt for that item appears at the bottom of the menu list. Menu 1 is shown in Figure F2, and Menu 2 is in Figure F4. The prompts and their respective menu items are listed in Figures F3 and F5. Figure F1 shows the DOS Utility menu, from option 4 on Menu 2 (Figure F4).

**F-2. Use.** The SAM menu provides smooth manipulation of the calculating programs, the graphics and the utilities. If C:\SAMEXE, C:\HECEXE, and C:\GSS are placed in the path in the autoexec.bat file, then the SAM menu, and SAM, can be run from any subdirectory simply by typing SAM.

**Filename conventions.** SAM currently uses both an automatic filename transfer procedure and a system of default filenames. The default input filename for all three calculation modules is SAM.IN.

The automatic filename transfer procedure in SAM creates a file, FILES.SAM, in the working directory which both keeps track of the last used file and provides a systematic way of naming various input and output files. PSAM, SAM.hyd, SAM.sed and SAM.yld, as well as LIST and COED, all look in FILES.SAM for the name of the input data file. A filename is written into FILES.SAM either by saving the file while in PSAM or by an execution of one of the three calculation modules, i.e., SAM.hyd. The file is then considered the current input filename, and computations on that file proceed automatically when it is present. The output files from the calculation modules are named after the input file, with special extensions. The first two letters of the extension will be:

<b>ho</b>	<b>H</b> ydraulics <b>O</b> utput;
<b>si</b>	<b>S</b> ediment transport calculations <b>I</b> nter;
<b>so</b>	<b>S</b> ediment transport calculations <b>O</b> utput;
<b>yi</b>	<b>s</b> ediment <b>Y</b> ield calculations <b>I</b> nter; or
<b>yo</b>	<b>s</b> ediment <b>Y</b> ield calculations <b>O</b> utput.

The third letter of the extension, if present, is the third letter of the original input filename. See Table F1 for examples. This system is **not** case-sensitive.

INPUT FILENAME	HYDRAULICS OUTPUT	SEDIMENT INPUT
hydpcin.in	hydpcin.ho	hydpcin.si
HYDPCIN.LIB	HYDPCIN.HOB	HYDPCIN.SIB
clearcrk.dat	clearcrk.hot	clearcrk.sit

Table F-1. Examples of default filenames from SAM.hyd.

To change the input data filename which runs automatically:

1. Run PSAM and read and save a new data filename; or
2. Run the SAM module and, after the default computations or messages, attach or run a new input filename at the module's main menu command prompt; or
3. Delete FILES.SAM, run SAM and attach or run a new input filename at the module's main menu command prompt.

The user cannot alter the automatic output filenames.

**NOTE:** The easiest way to make SAM stop running the wrong files automatically is to delete FILES.SAM.

If there is no filename in FILES.SAM, each module will look for the default filename, sam.in.

**F-2.1. Menu 1.** The SAM.hyd, SAM.sed, and SAM.yld options each execute a batch file that runs the respective calculation program and prepares a data file for the DSS graphics, except that SAM.yld does not utilize graphics. The Plot option loads the drivers and DSPLAY, with HYD.DSS as the default file opened. When this option is exited, the drivers are removed.

**NOTE:** If the PC gives a message about GSS not being the last driver loaded and creating holes that DOS could not fix, turn off the machine and start again.

Option 5 runs the PSAM program which allows the user to make SAM input files via a series of menus. Option 6 executes a batch file that runs the SAM.m95 program which can prepare a file for the DSS graphics if the user so directs. LIST, option 7, will prompt for the filename to open (defaulting to the filename from FILES.SAM), and then run in the standard manner.

**F-2.2. Menu 2.** To access the second screen of the SAM menu, hit F9, page up, page down or the left or right arrow key. The COED option will prompt for the filename to open and then run in the standard manner. SAM.aid runs the guidance program. The Particle Fall Velocity option runs Corps Program H0910. It has no graphics associated with it. The DOS Utilities option will execute several DOS commands without leaving the SAM program. When this option is selected, a menu appears offering the DOS commands, Figure F1. Each of these options prompt for the necessary parameters.

**F-2.3. Exiting.** The EXIT TO DOS option, last on both screens, returns the user to the DOS prompt. At this point various working files will be erased in an effort to maintain effective usage of disk space. The files erased are: TAPE96, TAPE97, TAPE98, HYD.DSC and SCRATCH.\*, all of which are associated with generating the DSS files; WORKFILE.TMP, used in conjunction with the filename work; and REREAD, used by the three main SAM modules during calculations. If the user is familiar with DSS and wishes to look at the TAPExx or SCRATCH files, this must be done with LIST or by renaming the files through the DOS utilities menu, before exiting the SAM menu.

**F-3. Background.** The batch file containing the menu commands is SAM.MDF. It is based on Automen Software Management System, a copyrighted software of Magee Enterprises. The files AUTOMAKE.EXE and AUTOTEMP.BAT are necessary for proper running of the SAM menu.

NOTE: If any of the executable programs in this package are run without going through the SAM menu, the screen display may look different.

**F-4. Notice.** Several programs listed on the menu are not sent with the SAM package. LIST and COED, and HECDSS and the GSS drivers are all shipped by HEC. Their phone number is (916)756-1104.

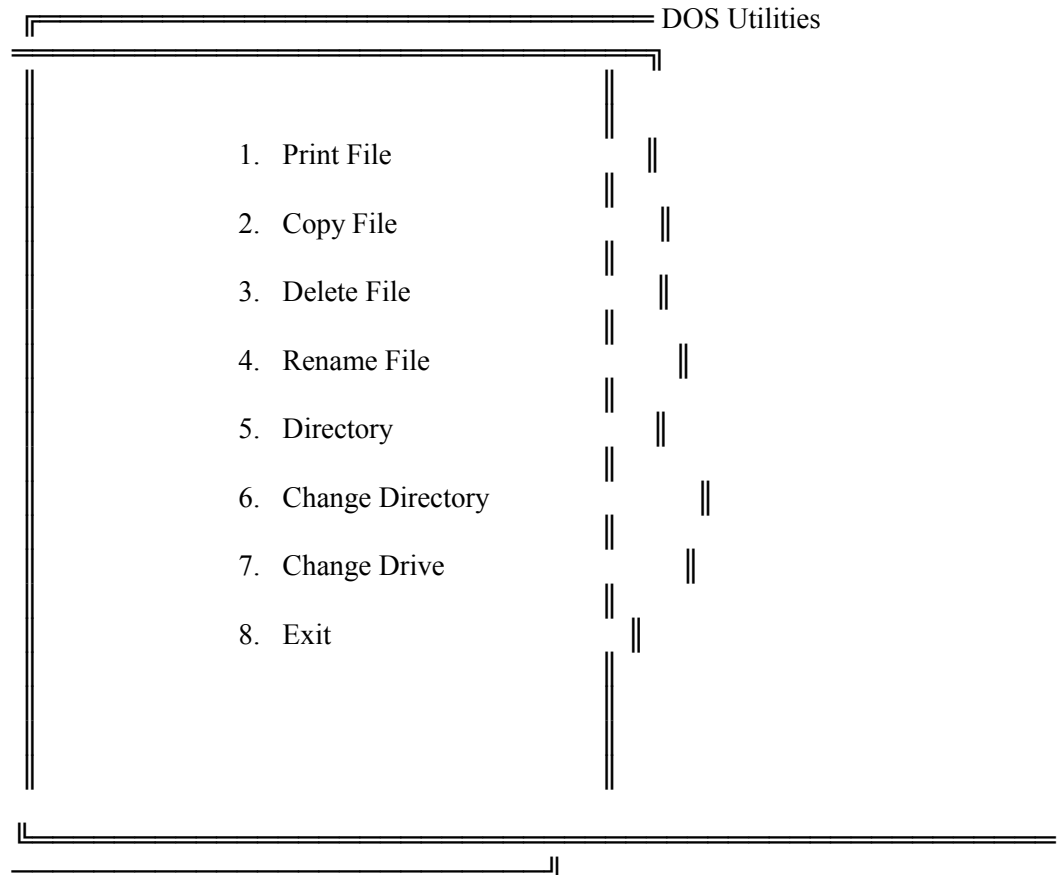
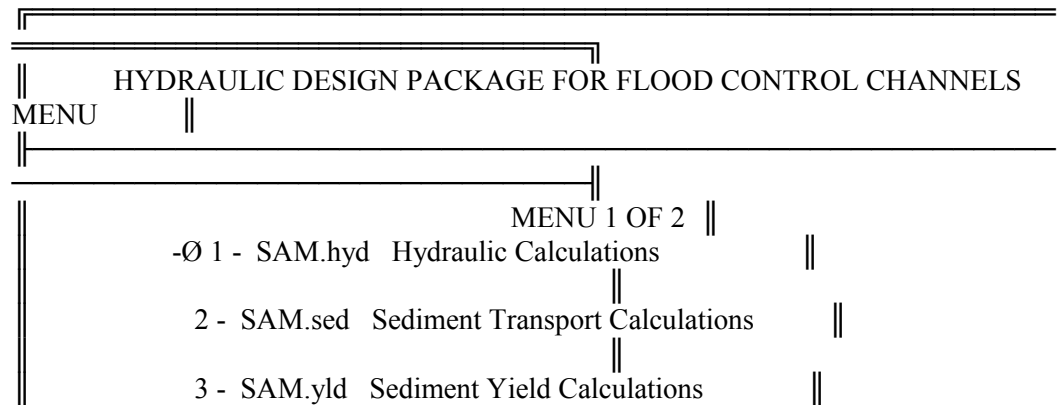


Figure F1. Menu Screen for Menu 2, Option 4: DOS Utilities.



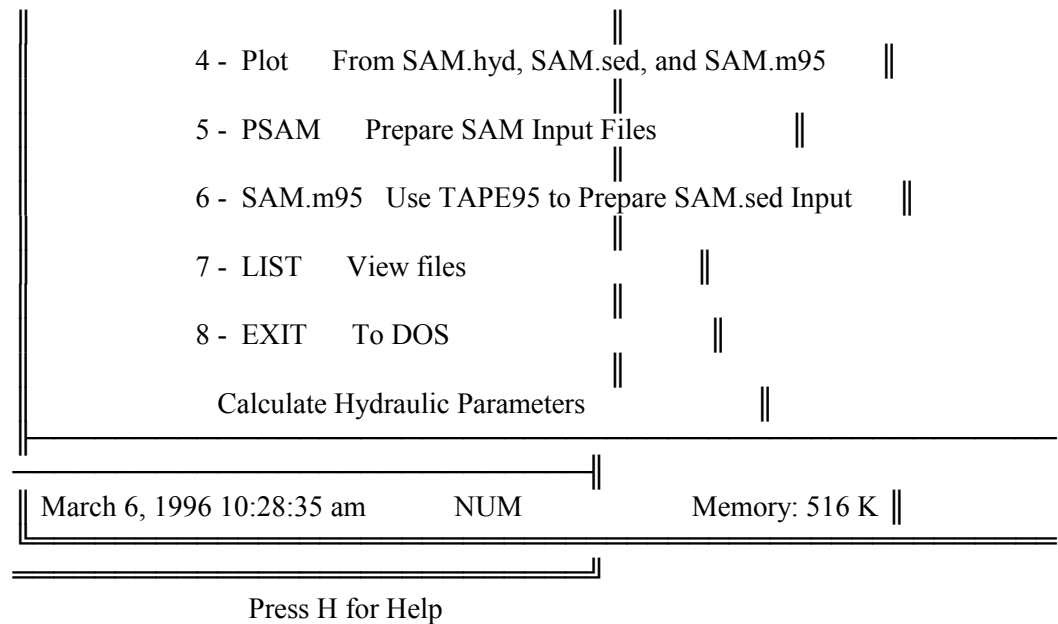


Figure F2. Menu 1 Screen for SAM.

1 - SAM.hyd Hydraulic Calculations	Calculate Hydraulic Parameters
2 - SAM.sed Sediment Transport Calculations Multi-Function	Calculate Bed Material Discharge--
3 - SAM.yld Sediment Yield Calculations	Calculate Sediment Yield
4 - Plot Hydraulic and Sediment Calculations from SAM Calculations	Run DISPLAY Program to Plot SAM
5 - PSAM Prepare SAM.hyd Input Files Options	Menu-Driven - For Selected SAM.hyd
6 - SAM.m95 Use TAPE95 to prepare SAM.sed Input File TAPE95	Calculate Reach Averages from HEC-2's
7 - LIST	Look at a File using LIST
8 - EXIT TO DOS DOS	EXIT -- Erase Scratch Files -- Return to

Figure F3. SAM menu items and their descriptive prompts,

Menu 1 of 2.

***** PAGE 2 MENU *****		
MENU 2 OF 2		
1 - COED	Corps of Engineers Editor	
2 - SAM.aid	Guidance - Select Transport Function	
3 - H0910	Particle Fall Velocity	
4 - UTIL	DOS Utilities	
5 - ----		
6 - ----		
7 - ----		
8 - EXIT	To DOS	
Edit a File using COED		
March 6, 1996 10:22:12 am	NUM	Memory: 516 K

Press H for Help

Figure F4. Menu 2 Screen for SAM.

- |                            |   |
|----------------------------|---|
| 1 - COED                   | Edit a File using COED                          |
| 2 - SAM.aid                | Guidance in Transport Function Selection        |
| 3 - Particle Fall Velocity | Particle Fall Velocity Corps Program            |
| H0910                      |   |
|                            | Aid Selecting Best Sediment Transport Functions |

4 - DOS UTILITIES	Delete, Rename, Copy ...
5 -	
6 -	
7 -	
8 - EXIT TO DOS	EXIT -- Erase Scratch Files -- Return to DOS

Figure F5. SAM menu items and their descriptive prompts, Menu 2 of 2.